

**Exhibit 300 (BY2008)**

<b>PART ONE</b>	
<b>OVERVIEW</b>	
<b>1. Date of Submission:</b>	2007-02-05
<b>2. Agency:</b>	009
<b>3. Bureau:</b>	20
<b>4. Investment Name:</b>	CDC PHIN: BioSense
<b>5. UPI:</b>	009-20-01-03-01-1163-00
<b>6. What kind of investment will this be in FY2008?</b>	
Mixed Life Cycle	
<b>7. What was the first budget year this investment was submitted to OMB?</b>	
FY2004	
<b>8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap.</b>	
<p>BioSense is a national program intended to improve the nation's capabilities for conducting near real-time biosurveillance and health situational awareness through access to existing data from healthcare organizations across the country and national data sources. BioSense is developing and implementing enhanced capabilities for early event detection and real-time health situational awareness. The objective is to expedite event recognition and response coordination among federal, state, and local public health and healthcare organizations by providing each level of public health access to the same data, at the same time. BioSense receives, analyzes, and evaluates health data from national data sources including DoD and VA hospitals and ambulatory care clinics, and a large commercial clinical laboratory. In addition, local hospitals and healthcare systems transmit real-time clinical data to BioSense. Public health uses BioSense data in many ways; to monitor disease trends in their communities, to track potential disease cases, and to incorporate with other local surveillance efforts. In 2005, the program's recruitment goal was to have one hospital from 10 different cities transmitting real-time data to BioSense. This goal was achieved. In 2006, the program's recruitment goal is to have 350 hospitals transmitting real-time data to BioSense. This goal is on track for achievement. BioSense supports four of CDC's Preparedness goals: decrease the time needed to classify health events as terrorism or naturally occurring, improve the timeliness and accuracy of communications regarding threats to the public's health, decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health, and decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.</p>	
<b>9. Did the Agency's Executive/Investment Committee approve this request?</b>	
yes	
<b>9.a. If "yes," what was the date of this approval?</b>	
2006-06-23	
<b>10. Did the Project Manager review this Exhibit?</b>	
yes	
<b>12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project.</b>	
no	
<b>12.a. Will this investment include electronic assets (including computers)?</b>	
yes	
<b>12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)</b>	
no	
<b>13. Does this investment support one of the PMA initiatives?</b>	
yes	
<i>If yes, select the initiatives that apply:</i>	
Expanded E-Government	

13.a. Briefly describe how this asset directly supports the identified initiative(s)?	
BioSense has been architected to allow states and local health departments to have a national repository for visualizing situational awareness. This egov initiative will allow hospitals and local governments to have aggregated data. Prior to BioSense, situational awareness had no national representation, so to create awareness was a manual effort for the public and government entities that own the data. The system allows mapping of progressing syndromes to be communicated via electronic media.	
14. Does this investment support a program assessed using OMB's Program Assessment Rating Tool (PART)?	
yes	
14.a. If yes, does this investment address a weakness found during the PART review?	
yes	
15. Is this investment for information technology (See section 53 for definition)?	
yes	
16. What is the level of the IT Project (per CIO Council's PM Guidance)?	
Level 3	
17. What project management qualifications does the Project Manager have? (per CIO Council's PM Guidance)	
(1) Project manager has been validated as qualified for this investment	
18. Is this investment identified as high risk on the Q4 - FY 2006 agency high risk report (per OMB's high risk memo)?	
yes	
19. Is this a financial management system?	
no	
19.a.1. If yes, which compliance area:	
Not Applicable	
19.a.2. If no, what does it address?	
BioSense is a national program intended to improve the nation's capabilities for conducting near real-time biosurveillance and health situational awareness through access to existing data from nationwide healthcare organizations and national data sources. The primary objective is to expedite event recognition and response coordination among federal, state, and local public health and healthcare organizations by providing each level of public health access to the same data simultaneously.	
20. What is the percentage breakout for the total FY2008 funding request for the following? (This should total 100%)	
<b>Hardware</b>	12
<b>Software</b>	4
<b>Services</b>	74
<b>Other</b>	10
21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?	
no	
22. Contact information of individual responsible for privacy related questions.	
<i>Name</i>	
Betsy A. Dunaway	
<i>Phone Number</i>	
404.639.4642	
<i>Title</i>	
CDC CONFIDENTIALITY PRIV OFCR	
<i>Email</i>	
BDunaway@cdc.gov	
23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?	

no

**SUMMARY OF SPEND**

1. Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated Government FTE Cost, and should be excluded from the amounts shown for Planning, Full Acquisition, and Operation/Maintenance. The total estimated annual cost of the investment is the sum of costs for Planning, Full Acquisition, and Operation/Maintenance. For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

All amounts represent Budget Authority

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 & Earlier	PY	CY	BY
	-2005	2006	2007	2008
<b>Planning Budgetary Resources</b>	0.300	0.000	0.000	0.000
<b>Acquisition Budgetary Resources</b>	72.850	31.360	29.440	28.300
<b>Maintenance Budgetary Resources</b>	0.000	2.440	2.440	2.400
<b>Government FTE Cost</b>	0.850	4.400	4.820	6.000
<b># of FTEs</b>	0	17	43	43

Note: For the cross-agency investments, this table should include all funding (both managing partner and partner agencies).

Government FTE Costs should not be included as part of the TOTAL represented.

2. Will this project require the agency to hire additional FTE's?

yes

2.a. If "yes," how many and in what year?

26 in FY2007

3. If the summary of spending has changed from the FY2007 President's budget request, briefly explain those changes.

**PERFORMANCE**

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use Table 1 below for reporting performance goals and measures for all non-IT investments and for existing IT investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2006.

Table 1

	Fiscal Year	Strategic Goal(s) Supported	Performance Measure	Actual/baseline (from Previous Year)	Planned Performance Metric (Target)	Performance Metric Results (Actual)
1	2004	Enhance the ability of the Nation's	Increase the volume the number of health interactions relates	Less than 5% of health interactions in key jurisdictions related to	"Health interactions" are those records	8,849,868 records

		healthcare system to effectively respond to bioterrorism and other public health challenges	to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, and federal public health agencies	the early detection and quantification of possible bioterrorism events are made available for analysis to local, state and federal public health agencies.	received for BioSense data sources that are binned into one or more of the eleven syndrome categories utilized in early event detection analysis	
2	2004	Enhance the ability of the Nation's healthcare system to effectively respond to bioterrorism and other public health challenges	Increase the number of potential data sources	CDC receives active daily feeds from no potential data sources	# of data sources	6 potential data sources
3	2005	Enhance the ability of the Nation's healthcare system to effectively respond to bioterrorism and other public health challenges	Increase the number of potential data sources	CDC receives active daily feeds from >2 potential data sources	# of data sources	7 potential data sources
4	2005	Enhance the ability of the Nation's healthcare system to effectively respond to bioterrorism and other public health challenges	Increase by 10% over the previous year's volume the number of health interactions relates to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, and federal public health agencies	8,849,868 records	"Health interactions" are those records received for BioSense data sources that are binned into one or more of the eleven syndrome categories utilized in early event detection analysis	30,143,598 records are available

All new IT investments initiated for FY 2005 and beyond must use Table 2 and are required to use the FEA Performance Reference Model (PRM). Please use Table 2 and the PRM to identify the performance information pertaining to this major IT investment. Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for at least four different Measurement Areas (for each fiscal year). The PRM is available at [www.egov.gov](http://www.egov.gov).

Table 2

	Fiscal Year	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
1	2006	Mission and Business Results	Population Health Management and Consumer Safety	# of health interactions in key jurisdictions related to the early detection and	30,143,598 records	Increase by 10% over the previous year's volume the number of health interactions related to the	As of April 2006: Achieved more than 20% over the previous

				quantification of possible bioterrorism events.		early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, federal public health agencies	year's volume
2	2006	Customer Results	New Customers and Market Penetration	% of state and local Public Health Department's serviced in key jurisdictions	TBD	33% of State and local public health agencies in key jurisdictions have access to BioSense data	Count of PH entities in User List being evaluated 7/28/06
3	2006	Technology	External Data Sharing	# of data sources	7 data sources	CDC acquires sources from 8 potential data sources	July 2006: 11 data sources and 35 hospitals sending foundational data
4	2006	Processes and Activities	Cycle Time	Time required to update BioSense data	Data completeness varies by Source from 2-4 days	BioSense data is updated within 24 hours of receipt from data providers	May-June 2006: 28 hospitals showed average 2.81 hours from "Time of Visit" to "Viewable in BioSense application"
5	2007	Processes and Activities	Cycle Time	Time required to update BioSense data	2.81 hours from "Time of Visit" to "Viewable in BioSense application"	No more than 2 hours from "Time of Visit" to "Viewable in BioSense application"	TBD
6	2007	Mission and Business Results	Population Health Management and Consumer Safety	# of health interactions in key jurisdictions related to early detection and quantification of possible bioterrorism events.	36 million records	Increase by 10% over the previous year's volume the number of health interactions related to the early detection and quantification of possible bioterrorism events that are made available for analysis to local, state, federal public health agencies	TBD
7	2007	Customer Results	New Customers and Market Penetration	% of eligible customer services	50% of State and local public health agencies in key jurisdictions	75% of State and local public health agencies in key jurisdictions have to access BioSense data	TBD

					have to access BioSense data		
8	2007	Technology	External Data Sharing	# of data sources	11 data sources and 39 hospitals sending foundational data	CDC acquires sources from 60 potential data sources and 1100 hospitals	TBD

### EA

*In order to successfully address this area of the business case and capital asset plan you must ensure the investment is included in the agency's EA and Capital Planning and Investment Control (CPIC) process, and is mapped to and supports the FEA. You must also ensure the business case demonstrates the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.*

1. Is this investment included in your agency's target enterprise architecture?

yes

2. Is this investment included in the agency's EA Transition Strategy?

yes

2.a. If yes, provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

CDC PHIN BioSense

3. Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <http://www.whitehouse.gov/omb/egov/>.

*Component: Use existing SRM Components or identify as NEW. A NEW component is one not already identified as a service component in the FEA SRM.*

*Reused Name and UPI: A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.*

*Internal or External Reuse?: Internal reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. External reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.*

*Funding Percentage: Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the funding level transferred to another agency to pay for the service.*

	Agency Component Name	Agency Component Description	Service Type	Component	Reused Component Name	Reused UPI	Internal or External Reuse?	Funding %
1	BioSense	Statistical Analysis	Analysis and Statistics	Mathematical			No Reuse	15
2	BioSense	Knowledge Discovery	Knowledge Discovery	Modeling			No Reuse	15
3	BioSense	Knowledge Discovery	Knowledge Discovery	Data Mining			No Reuse	30
4	BioSense	Reporting	Reporting	Ad Hoc			No Reuse	5
5	BioSense	Reporting	Reporting	Standardized / Canned			No Reuse	10
6	IT Infrastructure	Shared supporting network	Organizational Management	Network Management	Network Management	009-20-02-00-01-1152-	Internal	0

		services from ITSO				00		
7	SDN	Shared CDC Secure Data Network	Security Management	Identification and Authentication	Identification and Authentication	009-20-01-02-02-0581-00	Internal	0
8	PHIN Vocabulary	Shared PHIN Vocabulary Services	Data Management	Meta Data Management	Meta Data Management	009-20-01-02-01-0908-00	Internal	0

4. To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

FEA SRM Component: Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications.

Service Specification: In the Service Specification field, Agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

	SRM Component	Service Area	Service Category	Service Standard	Service Specification (i.e., vendor and product name)
1	Ad Hoc	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
2	Data Mining	Service Platform and Infrastructure	Support Platforms	Platform Independent	TBD
3	Data Mining	Service Platform and Infrastructure	Database / Storage	Database	TBD
4	Data Mining	Component Framework	Data Interchange	Data Exchange	TBD
5	Data Mining	Service Access and Delivery	Service Transport	Service Transport	TBD
6	Standardized / Canned	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD
7	Modeling	Service Platform and Infrastructure	Delivery Servers	Application Servers	TBD
8	Modeling	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
9	Mathematical	Service Platform and Infrastructure	Support Platforms	Platform Dependent	TBD
10	Mathematical	Component Framework	Business Logic	Platform Independent	TBD
11	Data Mining	Component Framework	Data Management	Database Connectivity	TBD
12	Ad Hoc	Component Framework	Presentation / Interface	Dynamic Server-Side Display	TBD
13	Identification and Authentication	Component Framework	Security	Certificates / Digital Signatures	Verisign
14	Modeling	Service Interface and Integration	Integration	Enterprise Application Integration	TBD

15	Mathematical	Service Interface and Integration	Interoperability	Data Transformation	Informatica
16	Meta Data Management	Service Interface and Integration	Interoperability	Data Format / Classification	Microsoft
17	Network Management	Service Access and Delivery	Service Transport	Supporting Network Services	Sonet, T3, T1

5. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)?

yes

5.a. If yes, please describe.

Optimal use of government funds is achieved by sharing CDC IT Infrastructure, CDC Secure Data Network (SDN) and PHIN Vocabulary Services. BioSense receives and displays data from BioWatch, the bioterrorism detection system funded and administered by the Department of Homeland Security, with participation from CDC, EPA, and FBI. The received BioWatch data is Intra-agency data.

6. Does this investment provide the public with access to a government automated information system?

no

## PART TWO

### RISK

You should perform a risk assessment during the early planning and initial concept phase of the investment's life-cycle, develop a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

Answer the following questions to describe how you are managing investment risks.

1. Does the investment have a Risk Management Plan?

yes

1.a. If yes, what is the date of the plan?

2006-09-13

1.b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?

yes

1.c. If yes, describe any significant changes:

BioSense underwent an Independent Verification and Validation (IV&V) assessment in order to ensure the chosen architecture and implementation approach is in alignment with industry best practices. This assessment began in May 2006 with the intent to do a thorough review of all aspects of the BioSense technical architecture, platform and operations. The study provided strengths and weaknesses as well recommendations to CDC on refining the vision, establishing goals, outcomes and performance metrics for BioSense. As a result of the IV&V, an updated risk management plan was implemented in September 2006.

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule: (O&M investments do NOT need to answer.)

The BioSense scope and budget planning using a work breakdown structure technique that decomposes each work element into its fundamental components. Each component is evaluated based on a risk assessment and the appropriate level of funding is assigned based on the work element's risk value. The budget for each element is derived based on the most likely scenario that has been risk adjusted. The total of each element comprises the full budget for BioSense. BioSense reviews its risks on a weekly basis and evaluates any potential changes to the budget plan.

### COST & SCHEDULE

Does the earned value management system meet the criteria in ANSI/EIA Standard 748?

yes

2.a. What is the Planned Value (PV)?

117.921

2.b. What is the Earned Value (EV)?



117.921
2.c. What is the actual cost of work performed (AC)?
123.332
What costs are included in the reported Cost/Schedule Performance information?
Contractor and Government
2.e. As of date:
2006-12-31
3. What is the calculated Schedule Performance Index (SPI= EV/PV)?
1
4. What is the schedule variance (SV = EV-PV)?
0.000
5. What is the calculated Cost Performance Index (CPI = EV/AC)?
0.96
6. What is the cost variance (CV = EV-AC)?
-5.411
7. Is the CV or SV greater than 10%?
no
7.b. If yes, explain the variance.
Note, BioSense is currently rebaselining in compliance with ANSI 748 standards. In the current IH4 table the prior year EVM is based on funded, current year is based on disbursements.
7.c. If yes, what corrective actions are being taken?
Senior management and the program management office, in addition to the integrated project team, continue to assess the performance of the BioSense project.
7.d. What is most current Estimate at Completion?
303.082
8. Have any significant changes been made to the baseline during the past fiscal year?
no